

**WHAT IS CLAIMED IS:**

1. A method for identifying a type of leukemia in a human subject, said method comprising:

obtaining a biological sample from said human subject, said sample comprising CD antigens;

contacting said sample with an array of immunoglobulin molecules, wherein each immunoglobulin in the array, with the exception of one or more negative controls, is capable of interaction with a CD antigen on one or more types of leukemia cells,

determining the pattern of interaction between the immunoglobulin molecules and the CD antigens in said sample, thereby providing an immunophenotype of the cells which is characteristic of said type of leukemia.

2. A method according to Claim 1, wherein the immunoglobulin molecules are monoclonal antibodies.

3. A method according to Claim 1, wherein the CD antigens are selected from CD2, CD3, CD4, CD5, CD7, CD8, CD9, CD10, CD11b, CD11c, CD13, CD14, CD15, CD16, CD19, CD20, CD21, CD22, CD23, CD24, CD25, CD33, CD34, CD36, CD37, CD38, CD41, CD42a, CD45, CD45RA, CD45RO, CD52, CD56, CD47, CD60, CD61, CD71, CD79a, CD95, CD103, CD117, CD122 and CD154.

4. A method according to Claim 1, wherein the CD antigens are selected from CD3, CD4, CD8, CD11b, CD14, CD19 and CD56.

5. A method according to Claim 1, wherein the CD antigens are selected from CD2, CD3, CD4, CD5, CD8, CD9 and CD103.

6. A method according to Claim 1, wherein the CD antigens are selected from CD10, CD19, CD20, CD21, CD22, CD23, CD25, CD37, CD45 and CD95.

7. A method according to Claim 1, wherein at least one of the immunoglobulin

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molecules in the array is capable of interaction with a CD antigen from chronic lymphocytic leukemia (CLL).

8. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from hairy cell leukemia (HCL).

9. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from chronic myeloid leukemia (CML).

10. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from acute myeloid leukemia (AML).

11. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from T-cell acute lymphocytic leukemia (ALL).

12. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from acute myelomonocytic leukemia (AMML).

13. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from acute erythrocytic leukemia (AEL).

14. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from acute megakaryocytic leukemia (AMegL).

15. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from acute monocytic

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leukemia (AMoL).

16. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from non-Hodgkin's lymphoma (NHL).

17. A method according to Claim 1, wherein at least one of the immunoglobulin molecules in the array is capable of interaction with a CD antigen from acute promyelocytic leukemia (APL).

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